

ICT AND EDUCATION

GABON



Map of Gabon¹

1. OVERVIEW

The society that thrives partly thanks to new information and communication technology is a society of information, which is becoming a necessary raw material to the global functioning and to all form of development.

Gabon has opted to set up a national system for information and generalized access supported by the use of new technology. However, in the education system, there is currently no linking plan between the administrative and teaching domains as far as ICT is concerned. It is true that computerizing school establishments - either in the management or teaching level- is an urgent need, but the means required to address this need are considerable. However, a computer plan of the Ministry of National Education has been in development since 2006.

Some constraints might exist in the various sectors but be different from one sector to another, and several projects do not live long because of the lack of a real commitment from the government.

Education, especially in the post-primary education levels, has a lot to gain from the use of this technology, which can provide unlimited access to information, facilitate understanding, and inspire the imagination, for teachers as well as learners. Furthermore, it makes it possible to communicate and interact from a distance, exchange experiences and work in a network, all of which are important factors for intellectual enrichment.

2. PROFILE

Gabon is a Central African country on the Equator, bordered by Cameroon and Equatorial Guinea to the North and by Congo to the East and South. It has 750 km of coastline to the

West, an equatorial climate that is hot and humid, with an alternance of dry and rainy seasons throughout the year. The country is home to forests where flora and fauna are still well conserved². The Ogoué River, with its tributaries, navigable for 1200 km, crosses the country from West to East.

It has a surface area of 267,667 sq km, a population of about 1,517,685 (2003) hence a density of 4.8 people per sq km, and a foreign population estimated at about 15.2%. The population lives mostly in the urban zones: 73% according to RGPH and 80% according to EDS 2000. About 80% of women and 75% of men between 15 and 49 years old live in the city.

In Gabon, the environment is rich in natural resources. It has a number of underground mineral deposits such as petroleum, uranium, manganese, niobium, phosphate, gold, etc. Oil is the country's main resource: between 62 and 78% of the budget resources in 2004 with a production of 13.5 million tons in 2004. Forest exploitation is the main source of employment and provides 13% of exports. Gabon is the 3rd exporter of manganese in the world.

The restricted industrial sector (19% of the GDP) is para-oil activities, wood manufacturing, food agriculture, cement works, and construction. There is an important development of the service sector (46% of the GDP), especially in distribution, transport, banks, insurance, business services, and telecommunications.

The Central African Fund for Stocks and Shares (BVMAC) is in Libreville, the capital city.

3. FACTS AND STATISTICS

Table 1: Economic Indicators

GDP 2004	9.2 million USD
GDP per capita 2004	5,112.2 USD
Growth rate 2004	1.5%
Inflation 2004	1.1%
Balance of running transactions 2004	-468.32 MUSD
Budget balance 2004	+439.2 MEUR
Total debt 2003	858 MUSD

Source : EUI, World Bank

4. EDUCATION SYSTEM

The education system is made up of pre-primary and primary education, general and technical or vocational secondary education, and higher education. Outside the traditional education system there are the professional training and literacy for youth and adults.

With a literacy rate of 85.4% in 2005, one of the highest in sub-Saharan Africa, and a primary education rate estimated at 92.44% (2005), the Gabonese population is quite literate and educated. But one must be cautious about this achievement because there is quite a low efficiency within the Gabonese education system.

As a matter of fact this system there are many dysfunctions as shown by the large number of students who are held back at a grade. The rate for students repeating a year was around 50% in the first year of primary school, and 30% in the second year. This is in addition to the high drop-out rate. 25% of students in each age group do not complete the primary education cycle. The large number of students repeating a grade is partly caused by large class size, lack of teachers in the rural regions and in certain urban zones, the quality of education, and the qualifications of the teachers.

A reform of the primary education system has been initiated by public officials. It deals with history, geography, and life and earth science in pre-primary education and the Basic Competence Approach (APC) which aims at reducing the number of years in gabonese primary school from 6 to 5.³

5. NATIONAL ICT POLICY

Gabon is trying to set up a national system of information and generalized access with the help of new technology, including the Internet to promote a better information management for development . This governmental system is integrated into a national context that is already in reform.

A development plan taking an example from the Network for Sustainable Development was brought into completion in 2000. Consultations were held in 2002 among all stakeholders to actualize the plan. The plan emphasizes the setting up of the infrastructure.

The Computer General Service (DGI) is responsible for the management of all the computers used in the Gabonese administration. As such it supervises the whole systems of management information of several departments. With regard of its position and importance, it makes national computer choices and standardizes the management of electronic information exchange among the different administrations.

Regulatory Framework and Sector Regulation

- Law made on June 27, 2001, on regulation of the Telecommunication sector, and the Ordinance of February 12, 2000 on telecommunication services.
- Exclusive rights given to Gabon Telecom (until 2006) for establishing national and international non-radio networks and for installing telephone service operating between fixed locations,
- Creation of the Telecommunication Regulation Agency (ARTEL) in 2001 with a statute on independent administrative authority.

6. ICT INFRASTRUCTURE

Gabon had more than 45,000 subscribers to fixed telephone lines in 2005; hence, a fixed telephone line density of 2.86%, but it's the cellular phone market that is in great expansion, with 500,000 subscriptions in 2004, corresponding to 36.2% of the population according to UIT. The GSM mobile network covers 85% of the country using network extensions.

Three main operators share the market, which should reach a climax in 2006 with 600,000 subscribers :

- LIBERTIS: 230,000 active subscribers in 2005 (45% of the market), present in 9 provinces;
- CELTEL: 255,000 active subscribers in 2005 (44% of the market), with coverage of 90% of the country;
- TELECEL: claimed 60,000 active subscribers in 2005 (11% of the market)

An interconnection agreement was signed at the end of 2003 between Gabon Telecom and the three GSM operators. It has 60,000 Internet users (5% of the population); 10,000 of these are subscribers.

Internet

Three Internet Access Providers share the market:

- Gabon Telecom (Inet)
- SOLSI (Online Services and Computer Systems)
- INTERNET GABON

Gabon has more than 200 cybercafés, 90% of which are in Libreville, and 25,000 micro-computers in the country according to ARTEL, making the rate of equipment 2%.

7. ICT IN EDUCATION

In Gabon today, the State is actually the main agent of technology development in the country. In Gabon, there is currently no plan linking the administrative and the educational domains as far as ICT are concerned. Beside the 2001 plan to equip high schools with ICT, no other initiative to promote ICT in education was recorded. A computer plan of the National Ministry of Education has been in preparation since 2006.⁴

Structures for ICT Training

- Institute of Technology (IST)
- University of Science and Technology of Masaku (USTM)
- School of Technical Education (ENSET)
- Digital francophone campus of Libreville which allows people to connect to the 1 Francophone Virtual University (UVF)
- Francophone University Agency (AUF) provides training in web design through the TRANSFER program for “supporting ICT in higher education and research”
- and Another AUF program is Information and Communication Technologies and Fostering Knowledge. Its primary activities concern:
 - Access to scientific and technical information
 - Internet access
 - Producing multimedia content
 - Supporting documents at the member establishments of AUF
 - Face-to-face vocational training (as opposed to distance training)
 - Distance training, leading to qualification
 - Web hosting for young innovative businesses

8. MAJOR INITIATIVES AND CURRENT PROJECTS

Friends of the Net Forum (<http://www.fan.africa-web.org>), is a Gabonese NGO whose goal is to make the Internet easier for youth to understand and use, and to help them create their own jobs.

This NGO has already launched two projects: “Net Rush” and the “Internet and Education” project. They concern the vulgarization of the Internet to make it easier for youth to use. Trainings are offered to young people so that they can then become trainers of other young novices in computers.

Source: <http://www.adeanet.org/distance/autres/conclusionadea.htm>

AUF: On the International Day of French Language, the Francophone University Agency, the cultural service of the French Embassy in Gabon, and the NGO “Friends of the Net Forum” organized a training for women in ICT use on March 24-26, 2006, “Women and ICT.” Women were invited to come and learn how to create their own websites.

The University of Omar Bongo Ondimba benefit from software and computer materials available in spite of the challenges faced due to inadequate telecommunication infrastructures, a lack of trained teachers and a deficit of experienced experts in information technology to assist in ICT development, maintenance and technical support in higher education institutions⁵.

9. Identification and description of constraints in the use of ICT

ICT has the major asset of enabling an access equal to education for all youth, and of including women in cooperative structures.

Education, especially in the levels of post-primary education, has a lot to gain from the use of this technology, which can provide unlimited access to information, facilitate understanding, and inspire the imagination, for teachers as well as learners. Furthermore, it makes it possible to communicate and interact from a distance through experience exchange and work in a network, all of which are important factors for intellectual enrichment.

ICT constitutes a major innovation. It makes it possible to search for employment in the public or private sector, thanks to the support of advanced technology, especially the Internet. The Internet offers the option to post available jobs, as well as to publish the information related to the qualifications of candidates and their level of education, so that the best can be recruited.

In the past, a number of projects do not live long because of a lack of a strong commitment from the government. It is therefore essential that the government is involved in all projects so that it supports and guarantees their sustainability.

Though the slow-action of Gabonese government to make endogenous decisions is well-known, it might be possible to achieve them through trade-unions made up of teaching representatives, the National Education trade-union (SEENA) and the Teachers in National Education Union (FESENA) which, in Gabon, put pressure on the National Ministry of Education to implement certain programs.

The other possibility will be to involve an institute like the College of Libreville (ENS) in the co-development of the project, so that it could then persuade policy-makers to include it in the state budget. After this, ENS could sell trainings to the different ministries.

10. REFERENCES

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January 2006

¹ <https://www.cia.gov/cia/publications/factbook/geos/gb.html>

² <http://fr.wikipedia.org/wiki/Gabon>

³ PNUD-GABON 2006

⁴ <http://www.adeanet.org/distance/autres/conclusionadea.htm>

⁵ <http://www.coopgabon.net/kci/info/127324.html>